



# IT-8300GA

**IT-8300GA**- Next Generation low DK Halogen free product for

- 4 G LTE Base Stations
- 5 G Base Stations & mm wave applications
- Antenna applications

**Features**

- Thermoset system with 205 °C Tg
- Very low loss ~0.0020 at 10 GHz.
- Halogen Free
- Excellent dimensional stability
- Very stable DK/Df with Temperature
- Ability to use very low profile Copper for reduced insertion loss.
- Highly suitable for Hybrids

## Data sheet - IT-8300GA

Property		Units	IT-8300GA
		Units	DK-3.00
THERMAL	Thickness		0.504(20 mils)
	Glass Transition Temp (Tg)	DMA	210
		DSC	201
		TMA	200
	Time to Delam (T300)	With Cu	> 60
	Solder Float		> 60
	Solder Dip (PCT@1 hour and 121°C)		> 60
	Thermal Decomposition Temp (5wt%)		433
	CTE: RT-150°C	X-axis	19.1
	CTE: RT-150°C	Y-axis	20.0
	CTE:α1	Z - axis	65
	CTE:α2	Z - axis	280
CTE	Z - axis	3.2	
ELECTRICAL	Thickness		0.504(20 mils)
	Dielectric Constant (Dk)	@2GHz	3.01
		@3GHz	3.01
		@5GHz	3.01
		@10GHz	3.00
	Dielectric Factor (Df)	@2GHz	0.0018
		@3GHz	0.0018
		@5GHz	0.0019
@10GHz		0.0020	
PHYSICAL	Water Absorption		0.22
	Peel Strength	1 oz (RTF )	>4.0
	Flammability	-	V0
	Thermal Conductivity		0.52
	Elastic modulus	X-axis	14.10
Y-axis		14.60	